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**THE FOLLOWING ARE THE ENGLISH TRANSLATION
OF ANNEXES TO THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT (ARTICLE 34):**

Amended Sheets (Pages 24 & 25)

We claim:

1. An integrated process for the synthesis of propylene oxide, which comprises at least the following steps:

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- (i) dehydrogenation of propane to give a substream T (0) comprising at least propane, propene and hydrogen;
- (ii) fractionation of the substream T (0) to give at least one gaseous hydrogen-rich substream T (2) and a substream T (1) comprising at least propene and propane;
- (iii) synthesis of hydrogen peroxide using the substream T (2), giving a substream T (4) which is rich in hydrogen peroxide and a gaseous substream T (6);
- (iv) fractionation of the substream T (1) to give at least one propane-rich substream T (5) and at least one propene-rich substream T (3);
- (v) reaction of the at least one substream T (3) with substream T (4) to give propylene oxide.

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2. An integrated process for the synthesis of propylene oxide, which comprises at least the following steps:

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- (a) dehydrogenation of propane to give a substream T (0) comprising at least propane, propene and hydrogen;
- (b) fractionation of the substream T (0) to give at least one gaseous hydrogen-rich substream T (2) and a substream T (1) comprising at least propene and propane;
- (c) fractionation of the substream T (1) to give at least one propane-rich substream T (5) and at least one propene-rich substream T (3);
- (d) separation of the substream T (5) into at least the substreams T (5a) and T (5b);
- (e) synthesis of hydrogen peroxide using the substream T (2) which is combined with at least the substream T (5a), giving a substream T (4) which is rich in hydrogen peroxide and a gaseous substream T (6a);
- (f) at least partial recirculation of the substream T (6a) to step (a);
- (g) reaction of the at least one substream T (3) with substream T (4) to give propylene oxide.

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3. A process as claimed in claim 1 or 2, wherein the propane-rich substream T (5) or T (5b) is fed to step (i) or step (a).
4. A process as claimed in any of claims 1 to 3, wherein substream T (4) comprises at least hydrogen peroxide and water.
5. A process as claimed in any of claims 1 to 4, wherein the reaction in step (v) or step (g) is the epoxidation of the propene from substream T (3) by means of hydrogen peroxide from substream T (4) in the presence of a catalyst to give propylene oxide.
6. A process as claimed in any of claims 1 to 5, wherein a substream T (7) comprising at least propane and/or propene is obtained from step (v) or step (g) and is wholly or partly recirculated to step (i) or step (a).
7. A process as claimed in any of claims 1 to 6, wherein a substream T (7) comprising at least propane and propene and having a ratio of propane to propene of less than 1 is obtained from step (v) or step (g) and is, if appropriate after a further work-up step, wholly or partly recirculated to step (iv) or step (c).
8. A process as claimed in claim 1 or any of claims 3 to 7, wherein all or some of the gaseous substream T (6) from step (iii), which comprises hydrogen and oxygen, is burnt in a further step (vi) to generate energy and the energy is utilized in step (i).
9. A process as claimed in claim 8, wherein the energy is utilized in step (i) for the following purposes, either individually or in combination with one another:
 - (aa) heating the apparatuses used in the dehydrogenation of propane;
 - (bb) regeneration of the catalyst or catalysts used in the propane dehydrogenation.
10. A process as claimed in claim 1 or any of claims 3 to 7, wherein all or part of the gaseous substream T (6) having a ratio of H_2 to O_2 in the range from 0.001:1 to 1000:1 which comes from step (iii) is recirculated to step (iii).
11. A process as claimed in claim 1 or any of claims 3 to 7, wherein all or part of the gaseous substream T (6) from step (iii) is recirculated to step (i).
12. A process as claimed in claim 2 or any of claims 3 to 7, wherein T (5b) is transferred to step (a).